

**Claims**

1. A method for screening, diagnosis or prognosis of Vascular Response in a subject, for determining the stage or severity of Vascular Response in a subject, for identifying a subject at risk of developing Vascular Response, or for monitoring the effect of therapy administered to a subject having Vascular Response, said method comprising:
  - (a) analyzing a test sample of a body fluid or tissue from the subject by two dimensional electrophoresis to generate a two-dimensional array of features, said array comprising at least one chosen feature whose relative abundance correlates with the presence, absence, stage or severity of Vascular Response or predicts the onset or course of Vascular Response; and
  - (b) comparing the abundance of each chosen feature in the test sample with the abundance of that chosen feature in body fluid from one or more subjects free from Vascular Response, or with a previously determined reference range for that feature in subjects free from Vascular Response, or with the abundance at least one Expression Reference Feature (ERF) in the test sample.
2. The method of claim 1, wherein the body fluid is blood.
3. The method of claim 1 or claim 2, wherein said method is for screening or diagnosis of Vascular Response and the relative abundance of at least one chosen feature correlates with the presence or absence of Vascular Response.
4. The method of claim 1 or claim 2, wherein said method is for monitoring the effect of therapy administered to a subject having Vascular Response and the relative abundance of at least one chosen feature correlates with the severity of Vascular Response.
5. The method of claim 1 or claim 2, wherein step (b) comprises comparing the

abundance of each chosen feature in the sample with the abundance of that chosen feature in a sample from one or more subjects free from Vascular Response or with a previously determined reference range for that chosen feature in subjects free from Vascular Response.

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6. The method according to claim 1 or claim 2, wherein step (b) comprises quantitatively detecting one or more of the following Vascular Response-Associated Features (VRFs): VRF-1, VRF-2, VRF-3, VRF-4, VRF-5, VRF-6, VRF-7, VRF-8, VRF-9, VRF-10, VRF-11, VRF-12, VRF-13, VRF-14, VRF-15, VRF-16, VRF-17, VRF-18, VRF-19, VRF-20, VRF-21, VRF-22, VRF-23, VRF-24, VRF-25, VRF-26, VRF-27, VRF-28, VRF-29, VRF-30, VRF-31, VRF-32, VRF-34, VRF-35, VRF-36, VRF-37, VRF-38, VRF-40, VRF-42, VRF-43, VRF-44, VRF-45, VRF-46, VRF-47, VRF-48, VRF-50, VRF-51, VRF-52, VRF-53, VRF-54, VRF-55, VRF-56, VRF-57, VRF-58, VRF-59, VRF-60, VRF-61, VRF-62, VRF-63, VRF-64, VRF-65, VRF-66, VRF-67, VRF-68, VRF-69, VRF-70, VRF-71, VRF-72, VRF-73, VRF-74, VRF-75, VRF-76, VRF-77, VRF-79, VRF-80, VRF-81, VRF-82, VRF-83, VRF-84, VRF-85, VRF-86, VRF-87, VRF-88, VRF-89, VRF-90, VRF-91, VRF-92, VRF-93, VRF-94, VRF-95, VRF-96, VRF-97, VRF-98, VRF-99, VRF-100, VRF-101, VRF-102, VRF-103, VRF-104, VRF-105, VRF-106, VRF-107, VRF-108, VRF-109, VRF-110, VRF-111, VRF-112, VRF-113, VRF-114, VRF-115, VRF-116, VRF-117, VRF-118, VRF-119, VRF-120, VRF-122, VRF-123, VRF-124, VRF-125, VRF-126, VRF-127, VRF-128, VRF-129, VRF-130, VRF-131, VRF-132, VRF-133, VRF-134, VRF-135, VRF-136, VRF-137, VRF-138, VRF-139, VRF-140, VRF-141, VRF-142, VRF-143, VRF-144, VRF-145, VRF-146, VRF-147, VRF-148, VRF-149, VRF-150, VRF-151, VRF-152, VRF-153, VRF-154, VRF-155, VRF-156, VRF-157, VRF-158, VRF-159, VRF-160, VRF-161, VRF-162, VRF-163, VRF-164, VRF-165, VRF-166, VRF-167, VRF-168, VRF-169, VRF-170, VRF-171, VRF-172, VRF-173, VRF-174, VRF-175, VRF-176, VRF-177, VRF-178, VRF-179, VRF-180, VRF-181, VRF-182, VRF-183, VRF-184, VRF-185, VRF-186, VRF-187, VRF-188, VRF-189, VRF-190, VRF-191, VRF-192, VRF-193, VRF-194, VRF-195, VRF-196, VRF-197, VRF-198, VRF-199, VRF-

200, VRF-201, VRF-202, VRF-203, VRF-204, VRF-205, VRF-206, VRF-207, VRF-  
208, VRF-209, VRF-210, VRF-211, VRF-212, VRF-213, VRF-214, VRF-215, VRF-  
216, VRF-217, VRF-218, VRF-219, VRF-220, VRF-221, VRF-222, VRF-223, VRF-  
224, VRF-225, VRF-226, VRF-227, VRF-228, VRF-229, VRF-230, VRF-231, VRF-  
5 232, VRF-233, VRF-234, VRF-235, VRF-236, VRF-237, VRF-238, VRF-239, VRF-  
240, VRF-241, VRF-242, VRF-243, VRF-244, VRF-245, VRF-246, VRF-247, VRF-  
248, VRF-249, VRF-250, VRF-251, VRF-252, VRF-253, VRF-254, VRF-255, VRF-  
256, VRF-257, VRF-258, VRF-259, VRF-260, VRF-261, VRF-262, VRF-263, VRF-  
264, VRF-265, VRF-266, VRF-267, VRF-268, VRF-269, VRF-270, VRF-271, VRF-  
10 272,

7. The method according to claim 1 or claim 2, wherein step (a) comprises  
15 isoelectric focussing followed by sodium dodecyl sulfate polyacrylamide gel  
electrophoresis (SDS-PAGE).

8. A method for screening, diagnosis or prognosis of Vascular Response in a  
subject, for determining the stage or severity of Vascular Response in a subject, for  
identifying a subject at risk of developing Vascular Response, or for monitoring the  
effect of therapy administered to a subject having Vascular Response, said method  
20 comprising quantitatively detecting, in a sample from the subject, at least one of the  
following Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-  
14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2,  
VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63,  
VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93,  
25 VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-  
115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-  
216, VRPI-238, VRPI-245, VRPI-249, VRPI-269,

9. The method according to claim 8, wherein the step of quantitatively detecting  
30 comprises testing at least one aliquot of the sample, said step of testing comprising:

5

- (a) contacting the aliquot with an antibody that is immunospecific for a preselected VRPI; and
- (b) quantitatively measuring any binding that has occurred between the antibody and at least one species in the aliquot.

10.

10. The method according to claim 9, wherein the antibody is a monoclonal antibody.

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11. The method according to claim 9, wherein the step of quantitatively detecting comprises testing a plurality of aliquots with a plurality of antibodies for quantitative detection of a plurality of preselected VRPIs.

15

12. The method according to claim 11, wherein the antibodies are monoclonal antibodies.

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13. A preparation comprising one or more of the following recombinant or isolated Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269,

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14. A preparation of claim 13, wherein the one or more VRPIs are in a recombinant form.

15. A kit comprising the preparation of claim 13 or 14.

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16. A kit comprising a plurality VRPIs, wherein each VRPI is a VRPI of claim 13

or claim 14.

17. An antibody capable of immunospecific binding to one of the following Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-5, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-10, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269 or an ortholog thereof.

18. The antibody of claim 17, which is a monoclonal antibody.

19. The antibody of claim 17 or 18, which binds to the VRPI with greater affinity 15 than to another isoform of the VRPI.

20. The antibody of claim 17 or 18, which binds to the VRPI with greater affinity than to any other isoform of the VRPI.

20 21. A kit comprising the antibody of claim 17 or 18.

22. A kit comprising a plurality of antibodies, wherein each antibody comprising 25 the plurality of antibodies is an antibody of claim 17 or 18.

23. A pharmaceutical composition comprising a therapeutically effective amount of an antibody of claims 17 or 18, and a pharmaceutically acceptable carrier.

24. A method of treating or preventing Vascular Response comprising 30 administering to a subject in need of such treatment or prevention a therapeutically effective amount of one or more of the following Vascular Response-Associated

Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-183, or an ortholog thereof.

5        25.    A method of treating or preventing Vascular Response comprising  
administering to a subject in need of such treatment or prevention a therapeutically  
effective amount of an antibody as claimed in any one of claims 17 or 18.

10        26.    A method of treating or preventing Vascular Response comprising  
administering to a subject in need of such treatment or prevention a therapeutically  
effective amount of a nucleic acid encoding one of the following Vascular Response-  
Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-  
23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-183, or  
an ortholog thereof

15        27.    A method of treating or preventing Vascular Response comprising  
administering to a subject in need of such treatment or prevention a therapeutically  
effective amount of a nucleic acid that inhibits the function of one or more of the  
following Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-43, VRPI-  
47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2,  
VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100,  
VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1,  
VRPI-118.2, VRPI-120, VRPI-130, VRPI-216, VRPI-238, VRPI-245, VRPI-249,  
VRPI-269, or an ortholog thereof.

25        28.    The method of claim 27, wherein the nucleic acid is a VRPI antisense nucleic  
acid or ribozyme.

30        29.    A method of screening for agents that interact with a VRPI, a VRPI fragment,  
or a VRPI-related polypeptide, said method comprising:

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- (a) contacting a VRPI, a VRPI fragment, or a VRPI-related polypeptide with a candidate agent; and
- (b) determining whether or not the candidate agent interacts with the VRPI, the VRPI fragment, or the VRPI-related polypeptide.

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30. The method of claim 29, wherein the VRPI, the VRPI fragment, or the VRPI-related polypeptide is expressed by cells.

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31. The method of claim 30, wherein the cells express a recombinant VRPI, a recombinant VRPI fragment, or a recombinant VRPI-related polypeptide.

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32. A method of screening for agents that modulate the expression or activity of a VRPI, a VRPI fragment or a VRPI-related polypeptide comprising:

- (a) contacting a first population of cells expressing a VRPI, a VRPI fragment or a VRPI-related polypeptide with a candidate agent;
- (b) contacting a second population of cells expressing said VRPI, said VRPI fragment or said VRPI-related polypeptide with a control agent; and
- (c) comparing the level of said VRPI, said VRPI fragment or said VRPI-related polypeptide or mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide in the first and second populations of cells, or comparing the level of induction of a cellular second messenger in the first and second populations of cells.

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33. The method of claim 32, wherein the level of said VRPI, said VRPI fragment or said VRPI-related polypeptide, mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or said cellular second messenger is greater in the first population of cells than in the second population of cells.

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34. The method of claim 32, further comprising the step of determining the ability of the candidate agent to induce an unwanted vascular response.

35. The method of claim 32, wherein the level of said VRPI, said VRPI fragment or said VRPI-related polypeptide, mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or said cellular second messenger is less in the first population of cells than in the second population of cells.

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36. A method of screening for or identifying agents that modulate the expression or activity of a VRPI, a VRPI fragment or a VRPI-related polypeptide comprising:

- (a) administering an agent to a first mammal or group of mammals; and
- (b) comparing the level of expression of the VRPI, the VRPI fragment or the

10 VRPI-related polypeptide or of mRNA encoding the VRPI, the VRPI fragment or the VRPI-related polypeptide in the first group with that of a second group which has not been administered the agent, or comparing the level of induction of a cellular second messenger in the first and second groups.

15 37. The method of claim 36, wherein the mammals are animal models for Vascular Response.

20 38. The method of claim 36 or 37, wherein the level of expression of said VRPI, said VRPI fragment or said VRPI-related polypeptide, mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or of said cellular second messenger is greater in the first group than in the second group.

25 39. The method of claim 36 or 37, wherein the level of expression of said VRPI, said VRPI fragment or said VRPI-related polypeptide, mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or of said cellular second messenger is less in the first group than in the second group.

40. The method of claim 36 or 37, wherein the levels of said VRPI, said VRPI fragment or said VRPI-related polypeptide, mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or of said cellular second messenger in the

first and second groups are further compared to the level of said VRPI, said VRPI fragment or said VRPI-related polypeptide or said mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide in normal control mammals.

5       41. The method of claim 36 or 37, wherein administration of said candidate agent modulates the level of said VRPI, said VRPI fragment or said VRPI-related polypeptide, or said mRNA encoding said VRPI, said VRPI fragment or said VRPI-related polypeptide, or said cellular second messenger in the first group towards the levels of said VRPI, said VRPI fragment or said VRPI-related polypeptide or said mRNA or said cellular second messenger in the second group.

10      42. The method of claim 36 or 37, wherein said mammals are human subjects having Vascular Response.

15      43. A method of screening for or identifying agents that interact with a VRPI, a VRPI fragment or a VRPI-related polypeptide, comprising  
(a) contacting a candidate agent with the VRPI, the VRPI fragment or the VRPI-related polypeptide, and  
(b) detecting binding, if any, between the agent and the VRPI, the VRPI fragment or the VRPI-related polypeptide.

20      44. A method of screening for or identifying agents that modulate the activity of a VRPI, said VRPI fragment or a VRPI-related polypeptide, comprising  
(a) in a first aliquot, contacting a candidate agent with the VRPI, said VRPI fragment or the VRPI-related polypeptide, and  
(b) comparing the activity of the VRPI, said VRPI fragment or the VRPI-related polypeptide in the first aliquot after addition of the candidate agent with the activity of the VRPI, said VRPI fragment or the VRPI-related polypeptide in a control aliquot, or with a previously determined reference range.

45. The method according to claim 43 or 44, wherein the VRPI, the VRPI fragment or the VRPI-related polypeptide is recombinant protein.

46. The method according to claim 43 or 44, wherein the VRPI, the VRPI fragment  
5 or the VRPI-related polypeptide is immobilized on a solid phase.

47. A method for screening, diagnosis or prognosis of Vascular Response in a subject or for monitoring the effect of an anti-Vascular Response drug or therapy administered to a subject, comprising:

10 (a) contacting at least one oligonucleotide probe comprising 10 or more consecutive nucleotides complementary to a nucleotide sequence encoding a VRPI chosen from, VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269, or an ortholog thereof, with an RNA obtained from a biological sample from the subject or with cDNA copied from the RNA wherein said contacting occurs under conditions that permit hybridization of the probe to the nucleotide sequence if present;

20 (b) detecting hybridization, if any, between the probe and the nucleotide sequence;

and

(c) comparing the hybridization, if any, detected in step (b) with the hybridization detected in a control sample, or with a previously determined reference range.

25 48. The method of claim 47, wherein step (a) comprises contacting a plurality of  
oligonucleotide probes comprising 10 or more consecutive nucleotides complementary  
to a nucleotide sequence encoding a VRPI chosen from, VRPI-1, VRPI-14, VRPI-18,  
VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-  
38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-  
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68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-  
95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116,  
VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238,  
VRPI-245, VRPI-249, VRPI-269, or an ortholog thereof, with an RNA obtained from  
5 a biological sample from the subject or with cDNA copied from the RNA wherein said  
contacting occurs under conditions that permit hybridization of the probe to the  
nucleotide sequence if present.

49. The method of claim 48, wherein step (a) includes the step of hybridising the  
10 nucleotide sequence to a DNA array, wherein one or more members of the array are  
the probes complementary to a plurality of nucleotide sequences encoding distinct  
VRPIs.

50. A method of modulating the activity of one or more of the following Vascular  
15 Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-  
19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38,  
VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1,  
VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95,  
VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-  
20 118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-  
245, VRPI-249, VRPI-269, or an ortholog thereof, comprising the step of contacting a  
cell with an agent which specifically binds to one or more of the following Vascular  
Response -Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-  
19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38,  
VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1,  
VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95,  
VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-  
25 118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-  
245, VRPI-249, VRPI-269, or an ortholog thereof, whereby the activity of the  
20 respective VRPI is modulated.

51. An agent that modulates the activity of one or more of the following Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, 5 VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269, or an ortholog thereof, wherein said agent is identified by 10 the method of any of claims 36, 43 or 44.

52. An agent as claimed in claim 51 for use in the manufacture of a medicament for the treatment or prevention of Vascular Response.

15 53. A pharmaceutical composition, comprising: the agent of claim 51 or 52, and a pharmaceutically acceptable carrier.

20 54. A method of treating or preventing Vascular Response comprising administering to a subject in need of such treatment or prevention a therapeutically effective dose of an agent that modulates the activity of one or more of the following Vascular Response-Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269, or an ortholog thereof, whereby the symptoms 25 of Vascular Response are ameliorated.

30 55. A method for identifying targets for therapeutic modulation of Vascular

Response wherein the activity of one or more of the following Vascular Response -Associated Protein Isoforms (VRPIs): VRPI-1, VRPI-14, VRPI-18, VRPI-19, VRPI-23, VRPI-28.1, VRPI-28.2, VRPI-32.1, VRPI-32.2, VRPI-36, VRPI-38, VRPI-43, VRPI-47.1, VRPI-47.2, VRPI-58, VRPI-61, VRPI-63, VRPI-65, VRPI-68.1, VRPI-68.2, VRPI-72, VRPI-73, VRPI-75, VRPI-86, VRPI-93, VRPI-94, VRPI-95, VRPI-100, VRPI-102, VRPI-104, VRPI-106, VRPI-108, VRPI-115, VRPI-116, VRPI-118.1, VRPI-118.2, VRPI-120, VRPI-130, VRPI-183, VRPI-216, VRPI-238, VRPI-245, VRPI-249, VRPI-269, or an ortholog thereof, is utilized as a measure to determine whether a candidate target is effective for modulation of Vascular Response.